

CERRO COPPER PRODUCTS CO.

A member of The Marmon Group of companies

INTERNAL MEMORANDUM

OTHER ADDRESSEES - FOR INFORMATION

R. E. Conreaux
C. Green
J. Hintz
G. Perschbacher
P. Tandler
File

HQ-10

SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

TO: Joe Burroughs

DATE: October 13, 1988

FROM: S. A. Silverstein

SUBJECT: BUILDING 80 WASTEWATER

I have checked back on all past monitoring reports and found that carbon tetrachloride did not show up at station 3B until June of 1988. For reasons that I do not recall, the May 1988 monitoring did not include VOA analysis for station 3B. From April 1988 back to August 1987 all reports show carbon tet below detectable limits for station 3B.

From this it must be concluded that somewhere around late spring some change took place in Building 80 since carbon tet has shown up in the wastewater sample there each time it was monitored. Dave Durham advises that he has not purchased any carbon tetrachloride for more than 10 years and he does not recall any new product purchased for any of the operations that might contain carbon tetrachloride. The only other samples where carbon tetrachloride has been reported during the entire period has been at the west outfall where it has shown up in a lesser concentration than station 3B from June through September, as would be expected.

By copy of this memo other addressees are requested to advise if they can think of any changes that have taken place in Building 80 earlier this year which might contribute to this change in wastewater characteristic. Only recently we learned that cleaning solution from the die maintenance operation in Building 80 has occasionally been dumped in the sewer and we are assured that this practice will be stopped. That material has been identified as espesol solvent 140F, supplied by Robins and it reportedly is used only in the die shop in Building 80. This leads to the question of why Building 80 die shop cannot use the same solvent that is used in the main Mill. The espesol material has been identified as 100% naptha, which does not represent a problem in wastewater, but being a highly flammable material it does cause some concern as a fire risk. It would be most desirable if that product could be eliminated by using 50/50 solvent for die cleaning.

SAS/ge

C03731

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OTHER ADDRESSEES - FOR INFORMATION

P. Tandler
J. Burroughs
File

1104

HQ-10 SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

TO: R. E. Conreaux

DATE: April 27, 1988

FROM: S. A. Silverstein

SUBJECT: REFINERY WASTEWATER

In approaching a method of achieving zero discharge for wastewater in the Anode Casting-Tankhouse complex, it is apparent that at least three streams of non-contact cooling water offer an opportunity for a significant reduction in flow.

The tin dryer uses city water in a once through pattern discharging to the sewers. Some time ago it was requested that this flow be diverted to the pond which serves as a hot well for the anode casting recirculating system as makeup water for the system, but this has never been done. More recently you mentioned the possibility of installing a separate cooling tower for the tin dryer and if that plan proceeds consideration must be given to the fact that blowdown from the cooling tower could not be discharged to the sewer.

The cooling water for the air compressors is recirculated through a cooling tower on the roof with blowdown and overflow passing into the sewer. This water might be used as makeup for the AP system; however, I believe that system receives adequate makeup water in the form of blowdown from the anode casting system. Ultimately I believe we will want to replace the foundry compressors with screw compressors which, being air cooled, would eliminate the use of cooling water. It is not likely that such compressor replacement would take place before we will need to reach zero discharge.

The Outokumpu Sheet Machine uses city water in a once through pattern for cooling the hydraulic system, with the water discharging into the air compressor system. This is well in excess of the requirements for makeup water in the compressor system resulting in a significant volume of overflow, almost on a steady basis whenever the sheet machine is operating. Consideration should be given to replacing the cooling water on the sheet machine with an air cooled oil cooler similar to the ones that have been successfully used on the bullblocks and the Schumag machine. (See related memo from Joe Burroughs, attached.)

SAS/ge

C03732

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INTERNAL MEMORANDUM

HQ-10 SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

TO: S. A. Silverstein

FROM: J. D. Burroughs

SUBJECT: OVERFLOW FROM FOUNDRY AIR COMPRESSOR COOLING SYSTEM

DATE: April 26, 1988

The overflow of water from the cooling tower for the Foundry air compressor cooling system, which was pointed out during our tour with Patterson, has not been stopped to date. Compressor operating personnel informed me that the overflow resulted from the discharge of the sheet machine hydraulic cooling water to the compressor system and that without that water there would be no overflow. They also suggested that the sheet machine could be cooled with water from the compressor system. Information from Dave Cornell indicates that this was the original intent.

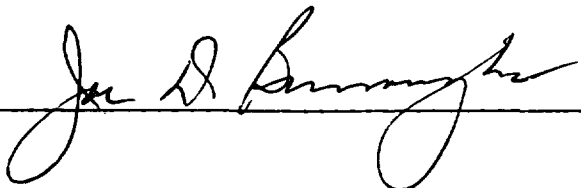
Foundry area maintenance personnel informed me that the sheet machine hydraulic cooler had originally been connected to the compressor system, but that the cooling was inadequate and the city water connection was made. Comment was also made that the tower overflowed without the sheet machine water.

A work request has been submitted to pipe the overflow to the floor drain so we can measure the discharge to the sewer.

Discharge of this water is wasteful in three ways:

1. The cost of the city water.
2. The cost of treating the compressor cooling water.
3. The cost of wastewater treatment.

JDB/ge



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